

Topic: Authentication

1. Which two of the following statements are true of managed identities for Azure resources? (Choose two.)

- A. Can be used to authenticate to Azure services without credentials in your code.
- B. Are free of charge with purchase of standard or premium Azure Key Vault.
- C. Give Azure services a managed identity in Azure Active Directory (AD).
- D. Involve two types of system-assigned identities in the Azure AD tenant.

Answer key: A, C

2. A company plans to use multi-factor authentication (MFA) to verify users' identities. Which of the following is an example of the "something only the user has" factor?

- A. Users answer security questions.
- B. A system analyzes users' typing patterns.
- C. Users insert smartcards into card readers.
- D. Users speak a random passphrase.

Answer key: C

3. Which type of permission is required in Azure Active Directory (AD) for an app that runs as a background service?

- A. Delegated permission
- B. Application permission
- C. Effective permission
- D. Static permission

Answer key: B

4. You want to give a user-assigned managed identity to a virtual machine (VM). Which two of the following methods can you use to do this? (Choose two.)

- A. Assign a user-assigned managed identity while creating the VM in the Azure portal.
- B. Use the Azure portal to assign a user-assigned managed identity to an existing VM.
- C. Use the Azure CLI command 'az identity create' to assign a user-assigned managed identity.
- D. Use the Azure CLI command 'az vm identity assign' to assign a user-assigned managed identity.

Answer key: B, C

5. Which two of the following are required for multi-tenant applications in Azure that are available to users in multiple directories?

(Choose two.)

- A. In each directory, a user's or administrator's consent before the app is registered.
- B. Signing keys that are different from those used for single-tenant apps.
- C. A way to determine the tenant that individual users are in.
- D. In each directory, dynamic user consent before the app is registered.

Answer key: A, C

6. You have enabled Azure MFA to protect your company's apps and data. Your users must now set up their accounts for additional security verification. Some users have installed the Microsoft Authenticator app to manage their passwords.

Which two authentication methods are supported by the Authenticator app?

(Choose two.)

- A. Call to phone
- B. Text message to phone
- C. Notification through mobile app
- D. Verification code from mobile app

Answer key: C, D

7. You want to disable the system-assigned managed identity on a VM. Which role assignment(s) must you have to complete this action?

- A. Virtual Machine Contributor
- B. Managed Identity Operator
- C. Virtual Machine Contributor and Managed Identity Operator
- D. Virtual Machine Contributor or Managed Identity Operator

Answer key: A

8. You want to use OpenID Connect and Azure AD to authorize access to a new webapp. You register the app with Azure AD, which generates an Application ID for the app. For which subsequent actions is the Application ID required?

- A. Validating the ID token.
- B. Responding to error codes.
- C. Sending a request for an access token.
- D. Sending a sign-out request to a user.

Answer key: C

Topic: Access control

1. Which of the following terms refers to an identity used by apps or services to access specific Azure resources?

- A. Service principal
- B. Security principal
- C. Managed identity
- D. Role definition

Answer key: A

2. Which of the following is true of Azure AD administrator roles but not Azure role-based access control (RBAC) roles?

- A. Allow you to create custom roles.
- B. Support specifying scope at multiple levels.
- C. Manage access to all Azure resources.
- D. Allow role info to be accessed in Azure admin portal.

Answer key: D

3. A role assignment consists of which of the following elements?

- A. Security principal, role definition, and scope
- B. Permissions, role definition, and scope
- C. Permissions, role definition, and users
- D. Security principal, permissions, and scope

Answer key: A

Topic: Secure data solutions

1. You want to use the Azure CLI to create a key vault called acmevault in the resource group Resources17 in the location East US. What command should you use?

- A. `az keyvault create --name "acmevault" --resource-group "Resources17" --location "east us"`
- B. `az keyvault key create --name "acmevault" --resourcegroup "Resources17" --region "eastus"`
- C. `az keyvault create --name "acmevault" --resource-group "Resources17" --location "eastus"`
- D. `az keyvault key create --name "acmevault" --resourcegroup "Resources17" --location "eastus"`

Answer key: C

2. Which one of the following is supported by all Azure Storage services (Blob, Queue, Table, and Files)?

- A. Customer-managed keys
- B. Client-side encryption
- C. Server-side encryption
- D. Client-side and server-side encryption

Answer key: C

3. Which of the following statements is true of the conceptual model used by Azure to quickly encrypt and decrypt large amounts of data?

- A. To limit access, data encryption keys are encrypted with symmetric encryption.
- B. The encryption key is the same as the key used to decrypt the data.
- C. Public and private keys are used for encryption.
- D. If data is partitioned, the same key is used for each partition.

Answer key: B

4. Which of the following statements is true of transparent data encryption (TDE)?

- A. Encryption is performed at the column level.
- B. The database encryption key is a symmetric key.
- C. Data and log files are encrypted and decrypted.
- D. The size of the encrypted database increases by 5–10 percent.

Answer key: C

5. Which encryption method is intended for sensitive data, such as credit card numbers stored in Azure SQL or SQL Server databases?

- A. Always Encrypted
- B. Transparent data encryption
- C. Storage Service Encryption
- D. Cosmos DB encryption

Answer key: A

6. Which two of the following statements describe a feature of vaults in Azure?

(Choose two.)

- A. Vaults enhance the security of apps by centralizing the storage of application secrets.
- B. Vaults can request and renew Transport Layer Security (TLS) certificates.
- C. Vaults eliminate the need for hardware security modules (HSMs) or software to enhance security.
- D. Vaults control and log access to what they contain.

Answer key: A, D

7. What type of data is Azure confidential computing designed to protect?

- A. data at rest
- B. data in use
- C. data in transit
- D. data in storage

Answer key: B

Azure Monitor

1. Which two items collected by Azure Monitor are stored in Azure Log Analytics?

(Choose two.)

- A. Network throughput for a particular IP address.
- B. Date and time that a virtual machine was created.
- C. Resources that a web app consumed on a particular date.
- D. Computers that have not sent heartbeats during the last hour.

Answer key: B, D

2. A company that runs a popular media-sharing website wants to fine-tune its strategy by obtaining information about how its visitors use the site.

Which Azure monitoring solution is the best source of this information?

- A. Azure Log Analytics
- B. Azure activity logs
- C. Azure Application Insights
- D. Metrics collected by Azure Monitor

Answer key: C

3. You want to reopen an alert that is currently closed.

What is the best way to do this?

- A. Change the state of the alert to New.
- B. Enable the alert through the Azure portal.
- C. Change the monitor condition of the alert to Fired.
- D. Create a new alert that is identical to the existing one.

Answer key: A

4. Which Azure service collects metrics from nodes, controllers, and containers in Kubernetes?

- A. Azure Log Analytics
- B. Azure Application Insights
- C. Azure Monitor for containers
- D. Azure Kubernetes Service (AKS)

Answer key: C

**5. Which two components could an action group for alerts contain?
(Choose two.)**

- A. Call to a webhook.
- B. Metrics that trigger the alerts.
- C. Phone number to receive a text message.
- D. List of virtual machines to be monitored,

Answer key: A, C

6. Which type of monitoring data does Azure Monitor collect from Azure AD?

- A. Service health notifications.
- B. Data related to an Azure tenant.
- C. Performance metrics from servers.
- D. Telemetry data from a guest operating system.

Answer key: B

7. You are using the Azure portal to define an alert rule that is triggered when your domain controller's CPU exceeds 70 percent capacity.

You have already set the appropriate virtual machine as the resource.

What should you do next?

- A. Select Percentage CPU as the signal.
- B. Define an action group for the rule.
- C. Enter a name and description for the rule.
- D. Specify Greater than 70% as the alert logic.

Answer key: A

Code scalability

1. You define several Autoscale profiles. Which profile type does Autoscale run first?

- A. Regular
- B. Fixed date
- C. Recurrence
- D. First one listed

Answer key: B

2. A virtual machine scale set has a capacity of 24.

One scale-out rule decreases capacity by six counts, and another scale-out rule decreases capacity by 30 percent.

After Autoscale chooses an action, what is the new capacity?

- A. 10
- B. 14
- C. 16
- D. 18

Answer key: D

3. You want to increase a scale set's maximum capacity on the first day of each month. On all other days, you want to use a consistent maximum capacity.

Which Autoscale profile types do you need?

- A. Regular and fixed date
- B. Regular and recurrence
- C. Fixed date and recurrence
- D. Regular, fixed date, and recurrence

Answer key: A

4. You manage an Azure subscription. You want to be notified automatically by email if Autoscale fails.

What should you do?

- A. Create a metric log alert.
- B. Create an activity log alert.
- C. Create an alert action group.
- D. Use the Notifications tab in the Autoscale setting.

Answer key: B

5. What can you do to avoid Autoscale "flapping" (rapid scale-in/scale-out loops)?

- A. Use both a scale-out and scale-in rule.
- B. Use only one profile in an Autoscale setting.
- C. Set an adequate margin between scale-out and scale-in thresholds.
- D. Select a default instance count that is appropriate for your scale set.

Answer key: C

6. You plan to use the Azure CLI to generate a list of all resource groups in the North Central US region.

What command should you run?

- A. `az group list "?location=='northcentralus'"`
- B. `az group list "[?location=='northcentralus']"`
- C. `az group list --query "?location=='northcentralus'"`
- D. `az group list --query "[?location=='northcentralus']"`

Answer key: D

7. A cloud application attempts to send a request to a service and encounters a failure. The fault is identified as a common transient failure.

What is the recommended action for the application?

- A. Cancel the operation.
- B. Retry the request immediately.
- C. Cancel and report an exception.
- D. Retry the request after a delay.

Answer key: D

8. Which statement most accurately describes what the Microsoft ASP.NET `IsTransient` method does?

- A. Identifies whether a transient failure can be compensated by a retry.
- B. Checks for exceptions that are specific to resources and environments.
- C. Checks for exceptions that are consistent across resources and environments.
- D. Specifies which retry pattern to use if a failure is identified as transient.

Answer key: B